

**II. Remarks**

By this amendment, applicants have canceled claim 1, have amended claims 2-8 and 10, and have added claim 11, without prejudice. The changes to the preamble of claims 2-8 and 10 redirect the dependency of these claims to new claim 11. The additional amendment to claim 4 to change the cover to the housing finds support in paragraph [0012] and Fig. 2. The additional amendment to claim 6 to change the cover to the system finds support in paragraph [0013] and Fig. 3. The additional amendment to claim 7 to change the housing to the oil pan finds support in paragraph [0013] and Fig. 3. Thus, no new matter is introduced. Applicants appreciate the allowance of claim 9. Entry of the amendment and favorable reconsideration of this application is respectfully requested in light of the following detailed discussion.

**Claim Rejections – 35 U.S.C. § 102**

The Examiner has rejected claims 1-3 under 35 U.S.C. 102(e) as being anticipated by Platz (U.S. Patent No. 6,416,341, hereinafter Platz).

The Examiner asserts that in regard to claims 1 and 3, Platz discloses a composite cover with an electrical bridge comprising a base component; a housing mounted to the base component defining an enclosure therein (see Fig. 1); the housing made of one of plastic and rubber material (see Abstract) at least one electrical connector integrally formed with the housing (see numeral 5), the at least one electrical connector including one or more electrical leads integrally formed with the housing that extend through the housing for allowing electrical energy to pass from an electrical

source outside the housing (see numeral 3) to an electrical device within the enclosure (see numeral 7), thereby forming an electrical bridge between the electrical source and the electrical device.

In regard to claim 2, the Examiner asserts that (sic Mathew) Platz discloses a seal disposed between the base component and the housing (see figure 1, numeral 8).

Since claim 1 has been canceled, the rejection of claim 1 is moot.

Applicants, however, have added independent claim 11, from which claims 2-3 now depend. Applicants assert that claim 11 requires at least the limitation of an electrical bridge system between an electrical source and an electrical device that comprises a housing shaped to integrally comprise both an external electrical connector 20 on an exterior of said housing and an internal electrical connector 26 on an interior of said housing, each connector integrally formed with one or more electrical leads integrally formed in and through the housing, said housing comprising a non-conductive material; and a base component; wherein, when said housing is mounted to said base component, an enclosure is defined therein, said connectors and said leads forming an electrical bridge from an electrical source located outside said enclosure to an electrical device located inside said enclosure.

After studying Platz, applicants cannot find anywhere in Platz where this reference teaches at least an integrally formed internal electrical connector on an interior of said housing like the internal electrical connector 26 shown in Fig. 1 of the present application (see, for example, paragraph [0011]. Instead, applicants find that

Platz teaches, “(o)n the inner side 4 there are conductor tracks 5 onto which an electronic subassembly 7 is fitted” (see, for example, column 4, lines 11-14).

Therefore, applicants respectfully submit that independent claim 11 and claims 2-3, which directly depend from claim 11, are not anticipated by Platz, as the inventions defined thereby are not identically disclosed in Platz, as required by 35 U.S.C. § 102(e).

Consequently, claims 2-3 and 11 should be allowed over Platz. Accordingly, withdrawal of the rejection of claims 2-3, favorable reconsideration of claims 2-3, and favorable consideration of claim 11 are respectfully requested.

Claim Rejections – 35 U.S.C. § 103

A. The Examiner has rejected claims 1-5 under 35 U.S.C. 103(a) as being unpatentable over Mathews et al. (U.S. Patent No. 5,035,637, hereinafter Mathews) in view of Santella (U.S. Patent No. 5,375,569, hereinafter Santella).

The Examiner asserts that in regard to claims 1 and 3, Mathews discloses a cover with an electrical bridge comprising a base component; a housing mounted to the base component defining an enclosure therein; at least one “electrical connector integrally formed with the housing,” the at least one electrical connector including one or more “electrical leads integrally formed with the housing” that extend through the housing for allowing electrical energy to pass from an electrical source outside the housing to an electrical device within the enclosure, thereby forming an electrical bridge between the electrical source and the electrical device (see Prior Art Fig. 1 that Mathews references).

The Examiner concedes that Mathews fails to disclose a composite cover; the housing made of one of plastic and rubber material, but the Examiner cites Santella as teaching a composite cover that is made of plastic material (see Abstract). The Examiner asserts that Santella further teaches that such an arrangement has the advantages of lighter weight, better noise reduction and better dimensional stability (see column 2, lines 7 to 13).

The Examiner concludes that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mathews' device by providing a conductive composite material as taught by Santella in order to increase the performance of the cover as taught by Santella.

Since claim 1 has been canceled, the rejection of claim 1 is moot.

Applicants, however, have added independent claim 11, from which claims 2-5 now directly or indirectly depend. Applicants assert that claim 11 requires at least the limitation of an electrical bridge system between an electrical source and an electrical device that comprises a housing shaped to integrally comprise both an external electrical connector on an exterior of said housing and an internal electrical connector on an interior of said housing, each connector integrally formed with one or more electrical leads integrally formed in and through the housing, said housing comprising a non-conductive material; and a base component; wherein, when said housing is mounted to said base component, an enclosure is defined therein, said connectors and

said leads forming an electrical bridge from an electrical source located outside said enclosure to an electrical device located inside said enclosure.

After studying both Mathews and Santella, applicants cannot find anywhere in either Mathews or Santella where these references teach at least an electrical bridge system that comprises a housing shaped to integrally comprise both an external electrical connector on an exterior of said housing and an internal electrical connector on an interior of said housing, each connector integrally formed with one or more electrical leads integrally formed in and through the housing.

Instead, applicants find the prior art valve cover to have holes "created" in the valve cover so as to pass electrical wires therethrough. In fact, Mathews states that this prior art valve cover requires the provision of complex "sealing components" that are disposed about the holes to provide an oil tight seal thereat (see, for example, column 1, lines 21-30).

In other words, the prior art valve cover of Mathews Fig. 1 does not teach an electrical bridge into the space between the cover (i.e., housing) and the base with the housing shaped to integrally comprise both an external electrical connector on an exterior of said housing and an internal electrical connector on an interior of said housing. In fact, Mathews Fig. 1 shows the leads going through a bridge (as the Examiner identifies it on page 5 of the March 5, 2007 Office Action) that is separate from the housing, wherein the bridge holds the leads in place by way of screws and the bridge is sealed to the housing. This structure does not satisfy the claimed invention

which requires each connector integrally formed with one or more electrical leads  
integrally formed in and through the housing.

Further, applicants find that the Mathews' invention (which is intended to replace the above-discussed prior art of Fig. 1) comprises an electrical bridge through the "sealing area between the cylinder head and the valve cover" by way of wires 25, for example, molded into the gasket body 12 between the cylinder head and the valve cover, and by other means at the valve cover to cylinder head area juncture (see, for example, column 1, line 53 to column 2, line 14 and Figs. 2, 4, 7, 8, 9, and 11).

After studying Santella, applicants can find nowhere in Santella where this reference overcomes the above-stated shortcomings of Mathews. Also, applicants cannot find support anywhere in Mathews and/or Santella where a) the Santella engine valve cover body 10, with the sealing flange 14 and the sealant 16, would function correctly when utilized with the base of the prior art apparatus of Fig. 1 of Mathews or where b) the Santella engine valve cover body 10 would function correctly when utilized with, for example, Mathews' molded gasket body 12 with control circuitry wires 25 and the cylinder head 28, for example, as illustrated in Fig. 2 of Mathews. In fact, if the Santella engine valve cover body 10 were to replace the housing of Mathews' Fig. 1, then this combination would provide no electrical bridge!

Regarding claim 2, the Examiner asserts that Mathews discloses a "seal" disposed between the base component and the housing (see Fig. 2, numeral 12).

Regarding claim 4, the Examiner asserts that Santella discloses that the cover comprises a valve cover for an internal combustion engine of a vehicle (see Abstract and Title).

Regarding claim 5, the Examiner asserts that Mathews discloses that the base component comprises a cylinder head of the internal combustion engine (see numeral 28).

Applicants traverse the 35 USC 103 rejections of claims 2 and 4 by asserting that each reference (Mathews and Santella) needs to be taken as a whole, when combined with the other reference. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1550, 220 USPQ 303, 311 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (it is error to consider “references in less than their entireties ...”.)

Specifically regarding the rejection of claim 2, applicants find the Examiner proposing that Mathews’ seal of Fig. 2 (which requires electrical wires 25 and thus, results in a secondary electrical bridge between the external power and the internal device 22) is to be disposed between the housing and base as depicted in Fig. 1 (i.e., prior art to Mathews). As a result of this assertion, applicants find that the Examiner is admitting that the bridge and leads of the prior art Fig. 1, which are the basis of the 103 rejection of independent claim 1 (now claim 11), are not be required.

Specifically regarding claim 4, applicants assert that if the cover body 10 of Santella (as the Examiner proposes) were to replace the prior art housing of Mathews’ Fig. 1, then the bridge and leads of Mathews would no longer exist in this Mathews/Santella combination. As result, the limitations that the electrical bridge

system integrally comprises both an external electrical connector on an exterior of said housing and an internal electrical connector on an interior of said housing, each connector integrally formed with one or more electrical leads integrally formed in and through the housing could not be satisfied.

In addition, if the cover body 10 of Santella replaces the housing of the prior art Fig. 1 of Mathews, then Santella's accompanying sealing flange 14 and sealant 16 would be applied to the combination with the base of Mathews prior art Fig. 1.

Applicants, however, find that both Mathews and Santella are silent as to whether such a combination would be proper. Hence, applicants assert that this 103 rejection of claim 4, based on this combination, must not stand.

Therefore, independent claim 11 and claims 2-5, which directly or indirectly depend from claim 11, are patentable over Mathews in view of Santella, as the claimed invention defined thereby is not suggested within either Mathews or Santella, nor is there any suggestion or motivation to modify these references' teachings in order to teach or suggest the claimed limitations, as required by 35 U.S.C. § 103.

Consequently, claims 2-5 and 11 should be allowed over Mathews in view of Santella. Accordingly, withdrawal of the rejections of claims 2-5, favorable reconsideration of claims 2-5, and favorable consideration of claim 11 are respectfully requested.

B. The Examiner has rejected claims 6-8 and 10 under 35 U.S.C. 103(a) as being unpatentable over Mathews in view of Santella as applied to the rejection of claim 1 above; and further in view of Billimack et al. (U.S. Patent No. 6,371,073, hereinafter Billimack).

The Examiner asserts that in regard to claim 6, Mathews as modified above discloses the claimed invention as recited in the rejection of claims 1-5. However, the Examiner concedes that Mathews fails to disclose that the cover comprises an oil pan. On the other hand, the Examiner asserts that Billimack teaches that the cover comprises an oil pan, wherein Billimack teaches the cover or oil pan cover being upon the cylinder head (see column 4, lines 30 to 35).

From this the Examiner asserts that it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the device of Mathews as modified above, by providing an oil pan as taught by Billimack. Thus, the moving parts in the cylinder head would then be lubricated.

The Examiner asserts that in regard to claim 10, Billimack discloses that the base component comprises a transmission by way of disclosing a base component that is a flywheel housing (18) or an engine cylinder block (16) (see the single figure of Billimack).

The Examiner asserts that in regard to claim 7, Mathews as modified in the rejection of claim 1 above discloses that the housing comprises a bottom "pan" flange (per the labeled prior art Fig. 1 in the Office Action of 03/05/2007).

The Examiner asserts that in regard to claim 8, Mathews discloses a “premold” positioned along a periphery of the bottom pan flange (see numeral 12). As to the method of “premold”, the Examiner asserts that a product by process claim is rejected over a prior art product that appears to be identical, although produced by a different process. Further, the Examiner asserts that the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the two. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

Since independent claim 11, from which claims 6-8 and 10 directly or indirectly depend, is patentable over Mathews in view of Santella, then claims 6-8 and 10 are also patentable over Mathews in view of Santella and further in view of Billimack, at least on this basis.

Specifically regarding claim 8, applicants assert that the gasket body 12 of Mathews, as the Examiner alleges, is not equivalent to the premold 68 of the claimed invention. In the subject application, the premold 68 supports one or more electrical leads 70 (see, for example, paragraph 14 and Fig. 3) that are positioned in the bottom of the pan flange 54. On the other hand, applicants find the gasket body 12 of Mathews to provide access from “outside” of the enclosure area to the “inside” of the enclosure area, via the gasket between the valve cover 27 and the cylinder head 28. Hence, applicants assert that this 103 rejection of claim 8, based on these combinations, must not stand.

Therefore, claims 6-8 and 10 are patentable over Mathews in view of Santella, and further in view of Billimack, as the claimed invention defined thereby is not

suggested within Mathews, Santella, or Billimack, nor is there any suggestion or motivation to modify these references' teachings in order to teach or suggest the claimed limitations, as required by 35 U.S.C. § 103.

Consequently, claims 6-8 and 10 should be allowed over Mathews in view of Santella, and further in view of Billimack. Accordingly, the withdrawal of the rejections of claims 6-8 and 10, and the favorable reconsideration of claims 6-8 and 10 are respectfully requested.

For all the reasons described in the preceding paragraphs, applicants respectfully submit that the present application is now in condition for allowance. Accordingly, a timely action to that end is courteously solicited.

If the Examiner has any remaining questions or concerns, or would prefer claim language different from that included herein, the favor of a telephone call to applicants' attorneys is requested.

Respectfully submitted,

  
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